**Amendments to the Claims:**

The following listing of claims replaces all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method for correlating services within a computer network, the method comprising:

providing a message interchange network for exchanging application-level messages between services, the message interchange network **being built on an open platform overlaying a public network and** managing a plurality of services**,** ~~**which are**~~ each **of the services being** accessible by a plurality of services **according to properties and permissions associated with each service in the plurality of services**; and

tracking correlation information regarding each application-level message received into message interchange network, wherein the application-level messages are being sent between pairs of the services, wherein the correlation information for each application-level message pertains to each application-level message and any other application-level messages related to the each application-level message**, the correlation information including one or more of: a Hop Identifier (ID) uniquely identifying a hop between a sender and receiver of the each application-level message, call information regarding a call to which the each application-level message and any other related application-level message belongs, and session information regarding a session to which the each application-level message and any other related application-level message belongs.**

2. (Cancelled)

3 (Cancelled)

4. (Currently Amended) A method as recited in claim **[[3]] 1**, wherein the message information for each application-level message further includes an identification of the each application-level message's sending service and receiving service.

5. (Currently Amended) A method as recited in claim **[[3]] 1**, wherein the message information for each application-level message further includes an indication as to whether the each application-level message has completed transmission.

6. (Previously Presented) A method as recited in claim 5, wherein the message information for each application-level message further includes a reason or error log regarding why the each application-level message has failed to complete its transmission if the each application-level message has failed.

7. (Currently Amended) A method as recited in claim **[[3]] 1**, wherein the message information for each application-level message further includes a portion of the each message content.

8. (Currently Amended) A method as recited in claim **[[3]] 1**, wherein the message information for each application-level message further includes two or more of the following: an identification of the each application-level message's sending and receiving service, an indication as to whether the each application-level message has completed transmission, a reason or error log regarding why the each application-level message has failed to complete its transmission if the each application-level message has failed, and a portion of the each application-level message content, a size of the each application-level message, a topic of the each application-level message, a status on processing steps taken on the each application-level message, and specification of any protocols used in receiving and sending the each application-level message.

9. (Currently Amended) A method as recited in claim **[[2]] 1**, wherein the call information for each call includes a Call Identifier (ID) uniquely identifying the each call.

10. (Original) A method as recited in claim 9, wherein the call information for each call further includes two or more of the following: an indication as to whether the each call is complete and a reason for the call not being complete if the each call fails to complete, a type of each call, a receiving and sending time for the each call, a sender and recipient service of each call, a status of policy evaluation for each call, and a set of hops in each call.

11. (Currently Amended) A method as recited in claim **[[2]]** **1**, wherein the session information for each session includes a Session Identifier (ID) uniquely identifying the each session.

12. (Original) A method as recited in claim 11, wherein the session information for each session further includes an indication as to whether the each session is complete and a reason for the session not being complete if the each session fails to complete.

13. (Previously Presented) A method as recited in claim 11, wherein the session information for each session further includes a calculated or executed route for application-level messages sent within the each session.

14. (Original) A method as recited in claim 11, wherein the session information for each session further includes an identity and status of each service of the each session.

15. (Original) A method as recited in claim 11, wherein the session information for each session further includes two or more of the following: an indication as to whether the each session is complete and a reason for the session not being complete if the each session fails to complete, a calculated or executed route for messages sent within the each session, and an identity and status of each service of the each session, an initiating time and completion time for each session, and an indication of a set of calls in each session.

16. (Currently Amended) A method as recited in claim **[[2]]** **1**, wherein each message belongs to a particular call between two of the services.

17. (Currently Amended) A method as recited in claim **[[2]]** **1**, wherein each call includes a request message and a response message or a notification message.

18. (Currently Amended) A method as recited in claim **[[2]]** **1**, wherein a call is defined as a set of predefined application-level message types.

19. (Currently Amended) A method as recited in claim **[[2]]** **1**, wherein a session is determined by the services which send application-level messages for the set of calls as a set of calls.

20. (Original) A method as recited in claim 1, wherein at least some of services are implemented on different computer systems and at least some of these computer systems differ from a computer system which implements the message interchange network.

21. (Currently Amended) A method as recited in claim **[[2]]** **1**, wherein the tracking of correlating information comprises:

receiving a current application-level message at the message interchange network, wherein the current application-level message belongs to a current session and a current call;

when the received current application-level message is a first message received for the current session, assigning a session identifier for the current message and embedding the session identifier in the current application-level message prior to forwarding ~~it~~ the application-level message to its destination service;

when the received current application-level message is a first message received for the current call, assigning a call identifier for the current application-level message and embedding the call identifier in the current application-level message prior to forwarding ~~it~~ the application-level message to its destination service;

assigning a hop identifier for the current application-level message which uniquely identifies the current application-level message; and

associating and storing the session identifier, the call identifier, and the hop identifier, along with message information, call information, and session information for the received application-level message.

22. (Currently Amended) A method as recited in claim **[[2]]** **1**, further comprising:

receiving a query for correlation information regarding a particular session or call, wherein the query is sent by a first one of the services; and

sending correlation information to the first service related to the particular session or call of the query.

23. (Previously Presented) A method as recited in claim 22, wherein the correlation information includes information regarding application-level messages sent between more than two services.

24. (Original) A method as recited in claim 22, further comprising determining whether the first service is authorized to make the query and only sending correlation information to the first service when it is determined that the first service is authorized.

25. (Original) A method as recited in claim 1, wherein at least one of the services is a routing script.

26. (Previously Presented) A method as recited in claim 1, wherein the correlation information includes at least one message identifier specified in at least one of the application-level messages which is sent by a sending service, the method further comprising:

receiving a query for correlation information regarding a particular message identifier, wherein the query is sent by a first one of the services; and

sending correlation information to the first service related to the particular message identifier of the query.

27. (Currently Amended) A computer system operable to correlate services within a computer network the computer system comprising:

one or more processors;

one or more memory, wherein at least one of the processors and memory are adapted for:

providing a message interchange network for exchanging application-level messages between services, the message interchange network **being built on an open platform overlaying a public network and** managing a plurality of services**,** ~~**which are**~~ each **of the services being** accessible by a plurality of services **according to properties and permissions associated with each service in the plurality of services**; and

tracking correlation information regarding each application-level message received into message interchange network, wherein the application-level messages are being sent between pairs of the services, wherein the correlation information for each application-level message pertains to each application-level message and any other application-level messages related to the each application-level message**, the correlation information including one or more of: a Hop Identifier (ID) uniquely identifying a hop between a sender and receiver of the each application-level message, call information regarding a call to which the each application-level message and any other related application-level message belongs, and session information regarding a**

**session to which the each application-level message and any other related application-level message belongs.**

28. (Cancelled)

29 (Cancelled)

30. (Currently Amended) A computer system as recited in claim **[[29]]** **27**, wherein the message information for each application-level message further includes two or more of the following: an identification of the each application-level message's sending and receiving service, an indication as to whether the each application-level message has completed transmission, a reason or error log regarding why the each application-level message has failed to complete its transmission if the each application-level message has failed, and a portion of the each application-level message content, a size of the each application-level message, a topic of the each application-level message, a status on processing steps taken on the each application-level message, and specification of any protocols used in receiving and sending the each application-level message.

31. (Currently Amended) A computer system as recited in claim **[[28]]** **27**, wherein the call information for each call includes a Call Identifier (ID) uniquely identifying the each call.

32. (Original) A computer system as recited in claim 31, wherein the call information for each call further includes two or more of the following: an indication as to whether the each call is complete and a reason for the call not being complete if the each call fails to complete, a type of each call, a receiving and sending time for the each call, a sender and recipient service of each call, a status of policy evaluation for each call, and a set of hops in each call.

33. (Currently Amended) A computer system as recited in claim **[[28]]** **27**, wherein the session information for each session includes a Session Identifier (ID) uniquely identifying the each session.

34. (Original) A computer system as recited in claim 33, wherein the session information for each session further includes two or more of the following: an indication as to whether the each session is complete and a reason for the session not being complete if the each session fails to

complete, a calculated or executed route for messages sent within the each session, and an identity and status of each service of the each session, an initiating time and completion time for each session, and an indication of a set of calls in each session.

35. (Previously Presented) A computer system as recited in claim 31, wherein each call includes a request message and a response message or a notification message.

36. (Currently Amended) A computer system as recited in claim **[[28]]** **27**, wherein a call is defined as a set of predefined application-level message types.

37. (Original) A computer system as recited in claim 36, wherein a session is determined by the services which send application-level messages for the set of calls as a set of calls.

38. (Original) A computer system as recited in claim 27, wherein at least some of services are implemented on difference computer systems and at least some of these computer systems differ from a computer system which implements the message interchange network.

39. (Currently Amended) A computer system as recited in claim **[[28]]** **27**, wherein the tracking of correlating information comprises:

receiving a current application-level message at the message interchange network, wherein the current application-level message belongs to a current session and a current call;

when the received current application-level message is a first message received for the current session, assigning a session identifier for the current message and embedding the session identifier in the current application-level message prior to forwarding ~~it~~ the application-level message to its destination service;

when ~~this~~ the received current application-level message is a first message received for the current call, assigning a call identifier for the current application-level message and embedding the call identifier in the current application-level message prior to forwarding ~~it~~ the application-level message to its destination service;

assigning a hop identifier for the current application-level message which uniquely identifies the current application-level message; and

associating and storing the session identifier, the call identifier, and the hop identifier, along with message information, call information, and session information for the received application-level message.

40. (Currently Amended) A computer system as recited in claim **[[28]]** **27**, wherein the at least one of the processors and memory are further adapted for:

receiving a query for correlation information regarding a particular session or call, wherein the query is sent by a first one of the services; and

sending correlation information to the first service related to the particular session or call of the query.

41. (Currently Amended) A computer system as recited in claim **[[26]]** **27**, wherein at least one of the services is a routing script.

42. (Currently Amended) A computer program product for correlating services within a computer network, the computer program product comprising:

at least one computer readable medium;

computer program instructions stored within the at least one computer readable medium configured for:

providing a message interchange network for exchanging application-level messages between services, the message interchange network **being built on an open platform overlaying a public network and** managing a plurality of services**, ~~which are~~** each **of the services being** accessible by a plurality of services **according to properties and permissions associated with each service in the plurality of services**; and

tracking correlation information regarding each application-level message received into message interchange network, wherein the application-level messages are being sent between pairs of the services, wherein the correlation information for each application-level message pertains to each application-level message and any other application-level messages related to the each application-level message**, the correlation information including one or more of: a Hop Identifier (ID) uniquely identifying a hop between a sender and receiver of the each application-level message, call information regarding a call to which the each application-level message and any other related application-level message belongs, and session information regarding a session to which the each application-level message and any other related application-level message belongs.**

43. (Cancelled)

44 (Cancelled)

45. (Currently Amended) A computer program product as recited in claim **[[44]]** **42**, wherein the message information for each application-level message further includes an identification of the each application-level message's sending service and receiving service.

46. (Currently Amended) A computer program product as recited in claim **[[44]]** **42**, wherein the message information for each application-level message further includes an indication as to whether the each application-level message has completed transmission.

47. (Previously Presented) A computer program product as recited in claim 46, wherein the message information for each application-level message further includes a reason or error log regarding why the each application-level message has failed to complete its transmission if the each application-level message has failed.

48. (Currently Amended) A computer program product as recited in claim **[[44]]** **42**, wherein the message information for each application-level message further includes a portion of the each message content.

49. (Currently Amended) A computer program product as recited in claim **[[44]]** **42**, wherein the message information for each application-level message further includes two or more of the following: an identification of the each application-level message's sending and receiving service, an indication as to whether the each application-level message has completed transmission, a reason or error log regarding why the each application-level message has failed to complete its transmission if the each application-level message has failed, and a portion of the each application-level message content, a size of the each application-level message, a topic of the each application-level message, a status on processing steps taken on the each application-level message, and specification of any protocols used in receiving and sending the each application-level message.

50. (Currently Amended) A computer program product as recited in claim **[[43]]** **42**, wherein the call information for each call includes a Call Identifier (ID) uniquely identifying the each call.

51. (Original) A computer program product as recited in claim 50, wherein the call information for each call further includes two or more of the following: an indication as to whether the each call is complete and a reason for the call not being complete if the each call fails to complete, a type of each call, a receiving and sending time for the each call, a sender and recipient service of each call, a status of policy evaluation for each call, and a set of hops in each call.

52. (Currently Amended) A computer program product as recited in claim **[[43]]** **42**, wherein the session information for each session includes a Session Identifier (ID) uniquely identifying the each session.

53. (Original) A computer program product as recited in claim 52, wherein the session information for each session further includes an indication as to whether the each session is complete and a reason for the session not being complete if the each session fails to complete.

54. (Previously Presented) A computer program product as recited in claim 52, wherein the session information for each session further includes a calculated or executed route for application-level messages sent within the each session.

55. (Original) A computer program product as recited in claim 52, wherein the session information for each session further includes an identity and status of each service of the each session.

56. (Original) A computer program product as recited in claim 52, wherein the session information for each session further includes two or more of the following: an indication as to whether the each session is complete and a reason for the session not being complete if the each session fails to complete, a calculated or executed route for messages sent within the each session, and an identity and status of each service of the each session, a initiating time and completion time for each session, an indication of a set of calls in each session.

57. (Currently Amended) A computer program product as recited in claim **[[43]]** **42**, wherein each message belongs to a particular call between two of the services.

58. (Currently Amended) A computer program product as recited in claim **[[43]]** **42**, wherein each call includes a request message and a response message or a notification message.

59. (Currently Amended) A computer program product as recited in claim **[[43]]** **42**, wherein a call is defined as a set of predefined application-level message types.

60. (Currently Amended) A computer program product as recited in claim **[[43]]** **42**, wherein a session is determined by the services which send application-level messages for the set of calls as a set of calls.

61. (Original) A computer program product as recited in claim 42, wherein at least some of services are implemented on difference computer systems and at least some of these computer systems differ from a computer system which implements the message interchange network.

62. (Currently Amended) A computer program product as recited in claim **[[43]]** **42**, wherein the tracking of correlating information comprises:

receiving a current application-level message at the message interchange network, wherein the current application-level message belongs to a current session and a current call;

when the received current application-level message is a first message received for the current session, assigning a session identifier for the current message and embedding the session identifier in the current application-level message prior to forwarding ~~it~~ the application-level message to its destination service;

when the received current application-level message is a first message received for the current call, assigning a call identifier for the current application-level message and embedding the call identifier in the current application-level message prior to forwarding ~~it~~ the application-level message to its destination service;

assigning a hop identifier for the current application-level message which uniquely identifies the current application-level message; and

associating and storing the session identifier, the call identifier, and the hop identifier, along with message information, call information, and session information for the received application-level message.

63. (Currently Amended) A computer program product as recited in claim **[[43]]** **42**, wherein the computer ~~**readable**~~ **program** product is further configured for:

receiving a query for correlation information regarding a particular session or call, wherein the query is sent by a first one of the services; and

sending correlation information to the first service related to the particular session or call of the query.

64. (Previously Presented) A computer program product as recited in claim 63, wherein the correlation information includes information regarding application-level messages sent between more than two services.

65. (Currently Amended) A computer program product as recited in claim 63, wherein the computer ~~readable~~ **program** product is further configured for determining whether the first service is authorized to make the query and only sending correlation information to the first service when it is determined that the first service is authorized.

66. (Original) A computer program product as recited in claim 42, wherein at least one of the services is a routing script.

67. (Previously Presented) A computer program product as recited in claim 42, wherein the correlation information includes at least one message identifier specified in at least one of the application-level messages which is sent by a sending service, the method further comprising:

receiving a query for correlation information regarding a particular message identifier, wherein the query is sent by a first one of the services; and

sending correlation information to the first service related to the particular message identifier of the query.